

What is claimed is:

1. A method of determining a pitch period, comprising:
5 determining a first primary peak of an input signal; and
determining a second primary peak of the input signal by
locating a maximum peak from a series of peaks centered a
period of time, equal to a prior pitch period, from the first
primary peak.

10 2. The method of claim 1 wherein the input signal is a
quasi-periodic waveform.

15 3. The method of claim 2 wherein the quasi-periodic
signal is a speech waveform.

4. The method of claim 1 wherein the series of peaks
comprises six peaks.

20 5. The method of claim 1, further comprising:
setting a buffer length.

6. The method of claim 5, further comprising:
setting a vector length.

25 7. The method of claim 5 wherein the buffer length
comprises 20 sample points at 8 kHz in a speech signal.

30 8. The method of claim 6 wherein the vector length
comprises 120 sample points at 8 kHz in a speech signal.

9. The method of claim 1, further comprising:
designating the second primary peak as a first primary
peak of a second pitch period subsequent to the pitch period.

5 10. The method of claim 1 wherein the prior pitch period
length is determined from taking a cepstrum of waveforms prior
to the pitch period.

10 11. The method of claim 1, further comprising:
generating a vector of each pitch period.

12. An article comprising a machine-readable medium that
stores executable instructions for determining a pitch period,
the instructions causing a machine to:
15 determine a first primary peak of an input signal; and
 determine a second primary peak of the input signal by
 locating a maximum peak from a series of peaks centered a
 period of time, equal to a prior pitch period, after the first
 primary peak.

20 13. The article of claim 12 wherein the input signal is
a quasi-periodic waveform.

14. The article of claim 13 wherein the quasi-periodic
25 signal is a speech waveform.

15. The article of claim 12 wherein the series of peaks
comprises six peaks.

30 16. The article of claim 12, further comprising
instructions causing the machine to:

set a buffer length.

17. The article of claim 16, further comprising instructions causing the machine to:

5 set a vector length.

18. The article of claim 16 wherein the buffer length comprises 20 sample points at 8 kHz in a speech signal.

10 19. The article of claim 17 wherein the vector length comprises 120 sample points at 8 kHz in a speech signal.

20. The article of claim 12, further comprising instructions causing the machine to:

15 designate the second primary peak as a first primary peak of a second pitch period subsequent to the pitch period.

21. The article of claim 17 wherein the prior pitch period is determined from taking a cepstrum of waveforms prior
20 to the pitch period.

22. The article of claim 12, further comprising instructions causing the machine to:

25 generate a vector of each pitch period.

23. An apparatus comprising:

 a memory that stores executable instructions for determining a pitch period; and

 a processor that executes the instructions to:
30 determine a first primary peak of an input signal;
 and

determine a second primary peak of the input signal by locating a maximum peak from a series of peaks centered a period of time, equal to a prior pitch period, after the first primary peak.

5

24. The apparatus of claim 23 wherein the input signal is a quasi-periodic waveform.

25. The apparatus of claim 24 wherein the quasi-periodic
10 signal is a speech waveform.

26. The apparatus of claim 23 wherein the series of peaks comprises six peaks.

15 27. The apparatus of claim 23 wherein the processor executes the instructions to:
set a buffer length.

28. The apparatus of claim 27 wherein the processor
20 executes the instructions to:
set a vector length.

29. The apparatus of claim 27 wherein the buffer length comprises 20 sample points at 8 kHz in a speech signal.
25

30. The apparatus of claim 28 wherein the vector length comprises 120 sample points at 8 kHz in a speech signal.

31. The apparatus of claim 23 wherein the processor
30 executes the instructions to:

designate the second primary peak as a first primary peak of a second pitch period subsequent to the pitch period.

5 32. The apparatus of claim 28 wherein the prior pitch period is determined from taking a cepstrum of waveforms prior to the pitch period.

10 33. The apparatus of claim 23 wherein the processor executes the instructions to:
generate a vector of each pitch period.